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ABSTRACT OF THE DISCLOSURE

One or more implantable system control units (SCU) apply one or more stimulating drugs and/or electrical pulses to a spinal section responsible for innervating the male reproductive organs. The SCU uses a power source/storage device, such as a rechargeable battery. If necessary, periodic recharging of such a battery is accomplished, for example, by inductive coupling with an external appliance. The SCU provides means of stimulating a tissue(s) with electrical and/or infusion pulses when desired, without the need for external appliances during the stimulation session. When necessary, external appliances are used for the transmission of data to and/or from the SCU(s) and/or for the transmission of power. In a preferred embodiment, the system is capable of open- and closed-loop operation. In closed-loop operation, at least one implant includes a sensor, and the sensed condition is used to adjust stimulation parameters.